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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/809,570 ALEXIA ET AL. Office Action Summary Examiner Art Unit TONYA JOSEPH 3628

The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no overt, however, may a reply be timely filed and the communication of the communicati				
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).				
Status				
1) Responsive to communication(s) filed on 23 January 2009.				
2a)☑ This action is FINAL . 2b)☐ This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims				
4) Claim(s) 19-44 is/are pending in the application.				
4a) Of the above claim(s) is/are withdrawn from consideration.				
5) Claim(s) is/are allowed.				
6)⊠ Claim(s) <u>19-44</u> is/are rejected.				
7) Claim(s) is/are objected to.				
8) Claim(s) are subject to restriction and/or election requirement.				
Application Papers				
9)☐ The specification is objected to by the Examiner.				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d)				
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119				
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of:				
 Certified copies of the priority documents have been received. 				
Certified copies of the priority documents have been received in Application No				
3. Copies of the certified copies of the priority documents have been received in this National Stage				
application from the International Bureau (PCT Rule 17.2(a)).				
* See the attached detailed Office action for a list of the certified copies not received.				

Attachment(s)	
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Notice of Draftsperson's Patent Drawing Review (PTO-948) Notice of Draftsperson's Patent Nots/Mail Date 01/23/2009.	4) Interview Summary (PTO-413) Paper No(s)/Mail Date. 5) Nokee of Informal Patent Application 6) Other:
S, Patent and Trademark Office	

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DETAILED ACTION

Status of Claims

Claims 19-44 have been previously examined. No claims have been added. No claims have been cancelled. Thus claims 19-44 are again presented for examination.

Response to Arguments

Applicant's arguments filed 01/21/2009 have been fully considered but they are not persuasive.

Claims 19-22, 24, 26-32 and 41

- 1. Applicant argues that the combination of applied references does not teach using an encryption key determined using the obtained data that enabled identification and authentication of the print member, means for sending the franking data and the encrypted signature to the printing unit in a second communication mode and for including a control signal with printing control signals. The Examiner disagrees. The combination of references plainly teach this limitation, (see the most previous Office Action dated 10/17/2008).
- 2. In response to applicant's argument that Strand and Paushinger are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Strand is concerned with cartridges operative to encrypt, decrypt, transmit and receive information (see the abstract of Strand and para. 19).

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Applicant further asserts Strand does not teach or suggest two communication modes. The Examiner disagrees. Pauschinger teaches this limitation (see Col. 7 lines 54-59). Applicant further asserts that Hetzer does not teach or suggest including control signals, but only print data signals. The Examiner disagrees. Hetzer plainly describes a control unit receiving signals (see para. 34).

- 3. In response to Applicant's arguments with respect to claims 22 and 44, the limitations are only afforded patentable weight to the extent that it imparts a structural difference of the claimed invention, which are met by the teachings of Pauschinger Col. 5 lines 54-61 and Col. 9 lines 47-52.
- 4. Applicant further argues that the limitation, "wherein the printed circuit is sufficiently flexible to bend easily and sufficiently thin to be installed on a standard inkjet printer cartridge without compromising installation of the cartridge in a standard inkjet printer associated with the cartridge" should be afforded patentable weight. The Examiner disagrees. The characteristics of a printed circuit that *may be* installed in a standard inkjet printer which *is not clamed* by the current invention is non-functional descriptive material. Furthermore, the printed circuit being sufficiently thin and flexible so as to be installed in another device does not alter the functionality of the franking machine.

Claim 23

5. In response to applicant's arguments with respect to claim 23 that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction

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based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

- 6. In response to applicant's argument that the combined references are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, all of the combined references are reasonably pertinent to the particular problem with which the applicant was concerned.
- 7. Applicant further argues with respect to claim 23 that the Examiner's use of Official Notice, of a substrate fixed permanently to the exterior of a print member is improper. The Examiner has cited a reference along with this Office Action to support the reasoning behind using Official Notice. For example:
 [Kanaya et al U.S. Patent No. 5,975,688] describes an ink cartridge with a projected

portion disposed on the outer surface of the cartridge which serves as an identifier (see Col. 2 lines 14-20, 35-40 and Fig. 1).

Claim 25

The Examiner maintains with respect to claim 25 that the combination of the cited references and the Examiner's Official Notice is a proper combination. The Examiner

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notes: Applicant has not challenged Examiner's use of Official Notice with respect to the subject matter of claim 25. Thus, the Examiner's use of Official Notice of the pertinent facts is considered admitted prior art.

Applicant further asserts with respect to claims 20 and 42-43 that because Beerling teaches an essentially rigid substance, the references are not properly combined. The Examiner disagrees. Nothing in Beerling tends to disparage the combination or otherwise present it as an unworkable solution. "[T]he prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed " In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

Claims 42-43

9. Applicant further asserts with respect to claim 42-43 that the Examiner's use of Official Notice, of a substrate fixed permanently to the exterior of a print member is improper. The Examiner has cited a reference along with this Office Action to support the reasoning behind using Official Notice. For example:

[Francisco U.S. Patent No. 5,185,866] describes a dual communication system which uses different communication channels in a franking environment (see Col. 12 lines 1-25 and the Abstract of Francisco).

The Examiner notes: Applicant has not challenged Examiner's use of Official Notice with respect to the subject matter of claim 43. Thus, the Examiner's use of Official Notice of the pertinent facts is considered <u>admitted prior art</u>.

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The rejections of the dependent claims are maintained at least for the reasons described above

Examiner notes: The references to Kanaya and Francisco provided to substantiate the previous Official Notice statements, do not result in a new basis for rejection, and therefore, this rejection is made FINAL.

Accordingly, Applicant's arguments with respect to claims 19-44 are not persuasive and the rejections are maintained.

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary sikl lin the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 19-22, 24, 26-31 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pauschinger et al. U.S. patent No. 6,978,255 B1 in view of Pauschinger U.S. Patent No. 6,041,704 in further view of Strand U.S. Pre-Grant Publication No. 2002/0199094 A1 and Hetzer at al. U.S. Pre-Grant Publication No. 2002/0140755.
- 3. As per Claims 19 and 31, Pauschinger et al. teaches a unit for generating franking data and a unit for printing data connected to said data generating unit and adapted to receive franking data therefrom (see Col. 5 lines 54-61 and Col. 9 lines 47-52), said printing unit including at least one member for printing data (see Col. 6 lines

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36-41), wherein the franking machine includes: means for obtaining data enabling unique identification and authentication of the print member by the data generating unit in a first communication mode (see Col. 6 lines 63-67; Col. 7 lines 1-2; 40-44 and Col. 4 lines 49-51). Pauschinger et al. does not explicitly teach the limitation taught by Pauschinger wherein the franking machine includes: means for generating a signature of the franking data by the data generating unit (see Col. 5 lines 3-8), means for encrypting the signature of the franking data by the data generating unit using an encryption key determined using the obtained data that enabled identification and authentication of the print member (see Col. 5 lines 3-20 and 36-40), means for sending the franking data and the encrypted signature to the printing unit in a second communication mode, (see Col. 7 lines 54-59). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Pauschinger et al to include the teachings of Pauschinger to allow for the verification of franking imprints as taught in Pauschinger Col. 5 lines 5-7. Pauschinger et al. teaches and means for decrypting the encrypted signature. Pauschinger et al does not explicitly teach decryption performed by the print member. Strand teaches, The conduit cartridge encrypts information sent to an analytical system or an operating facility in communication with the conduit cartridge and can decrypt encrypted information received from an analytical system or an operating facility (see The Abstract of Strand). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the systems of Pauschinger at al. and Pauschinger to include the teachings of Strand in order to provide for automated remote analyses, as taught in

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Strand para. 6 lines 3-4. Pauschinger does not explicitly teach the limitation taught by Hetzer et al. said printing unit including means for receiving printer control signals and a franking machine which include means for including/sending a control signal with printing control signals (see para. 34). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the systems of Pauschinger at al; Pauschinger and Strand to include the limitations of Hetzer to enable printing of desired data.

- 4. As per Claim 20, Pauschinger et al; Pauschinger and Strand teach the system of claim 1 as described above. Pauschinger et al. does not explicitly teach, wherein the print member includes means for authenticating data. Strand teaches the print member includes means for authenticating data (see para. 15 lines 29-34; 45-50; 53-54; 60-64 and para. 19 lines 4-20). Pauschinger et al. teaches franking data. It would have been prima facie obvious to one of ordinary skill in the art to modify the systems of Pauschinger at al; Pauschinger and Hetzer to further include the teachings of Strand in order to provide for automated remote analyses, as taught in Strand para. 6 lines 3-4.
- 5. As per Claim 21, Pauschinger et al; Pauschinger and Strand teach the system of claim 19 as described above. Pauschinger does not explicitly teach wherein the print member includes means for verifying the integrity of the franking data. Strand teaches wherein the print member includes means for verifying the integrity of the data (see para. 15 lines 29-34; 45-50; 53-54; 60-64 and para. 19 lines 4-20). Pauschinger et al. teaches franking data. It would have been prima facie obvious to one of ordinary skill in the art to modify the systems of Pauschinger at al; Pauschinger and Hetzer to further

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include the teachings of Strand in order to provide for automated remote analyses, as taught in Strand para. 6 lines 3-4.

- 6. As per Claim 22 and 44, Pauschinger et al; Pauschinger and Strand teach the system of claim 19 as described above. Pauschinger does not explicitly teach wherein the print member includes at least one tag identifying said print member. Strand teaches wherein the print member includes at least one tag identifying said print member (see para. 12 lines 6-10). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the systems of Pauschinger et al; Pauschinger and Hetzer to further include the teachings of Strand to aid in the identification of the cartridge. The limitation, "communicates data identifying said member to the data generating unit by radio waves when an electromagnetic field is applied to it"; "such that attempting to remove the tag will render it in operative is merely a statement of intended result and as such is afforded little patentable weight.
- 7. As per Claim 24, Pauschinger et al; Pauschinger and Strand teach the system of claim 19 as described above. Pauschinger et al. further teaches, wherein the data-generating unit includes a circuit for receiving identification data (see Col. 6 lines 63-67, Col. 7 lines 1-2 and 40-44, Examiner is interpreting meter able to recognize an identification code word as containing a circuit for receiving identification data).
- 8. As per Claim 26, Pauschinger et al; Pauschinger and Strand teach the system of claim 19 as described above. Pauschinger does not explicitly teach wherein the decrypting means of the print member have obtains data identifying said print member.
 Strand teaches wherein the decrypting means of the print member have knowledge of

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data identifying said print member (see para. 19 lines 34-44). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the systems of Pauschinger et al. and Pauschinger to include the teachings of Strand in order to maintain data integrity, as taught in Strand para. 34-44.

- 9. As per Claim 27, Pauschinger et al; Pauschinger and Strand teach the system of claim 19 as described above. Pauschinger et al. does not explicitly teach wherein the print member includes a data processing unit that includes the decrypting means.
 Strand teaches wherein the print member includes a data processing unit that includes the decrypting means (see para.15 lines 60-64). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the systems of Pauschinger et al. and Pauschinger to include the teachings of Strand in order to decrypt transmitted information, as taught in Strand para. 60-69.
- 10. As per Claim 28, Pauschinger et al; Pauschinger and Strand teach the system of claim 19 as described above. Pauschinger et al; does not explicitly teach the limitation taught by Strand wherein the decrypting means are fixed to a printed circuit that is fixed to the print member (see para. 18 and Fig. 3. It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the systems of Pauschinger et al. and Pauschinger to include the teachings of Strand in order to verify information used by the cartridge, as taught in para. 17 lines 7-10. The limitation "wherein the printed circuit is sufficiently flexible to bend easily and sufficiently thin to be installed on a standard inkjet printer cartridge without compromising installation of the

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cartridge in a standard inkjet printer associated with the cartridge" is considered nonfunctional descriptive material and as such is afforded no patentable weight.

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- 11. As per Claim 29, Pauschinger et al; Pauschinger and Strand teach the system of claim 19 as described above. Pauschinger et al; does not explicitly teach wherein the data processing unit is fixed to a circuit that is fixed to the print member; wherein the printed circuit is sufficiently flexible to bend easily and sufficiently thin to be installed on a standard inkjet printer cartridge without compromising installation of the cartridge in a standard inkjet printer associated with the cartridge Strand teaches wherein the data processing unit is fixed to a circuit that is fixed to the print member (see para. 12 lines 6-20 and Fig. 3). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the systems of Pauschinger et al. and Pauschinger to include the teachings of Strand in order to verify information used by the cartridge, as taught in para. 17 lines 7-10. The limitation "printed" is considered non-functional descriptive material and as such is afforded no patentable weight.
- 12. As per Claim 30, Pauschinger et al; Pauschinger and Strand teach the system of claim 19 as described above. Pauschinger et al. further teaches wherein the print member is an inkjet printer cartridge including at least one print head (see Col. 6 lines 31-41).
- Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over
 Pauschinger et al. U.S. Patent No. 6,978,255 B1 in view of Pauschinger U.S. Patent No. 6,041,704 in further view of Strand U.S. Pre-Grant Publication No. 2002/0199094 A1;

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Hetzer at al. U.S. Pre-Grant Publication No. 2002/0140755; Official Notice, as supported by Kanaya, and Chung U.S. Pre-Grant Publication No. 2003/0006878 A1.

- As per Claim 23, Pauschinger et al; Pauschinger and Strand teach the system of claim 22 as described above. Pauschinger does not explicitly teach wherein the identification tag includes a substrate fixed permanently to the print member. Strand teaches wherein the identification tag includes a substrate fixed permanently to the print member (see para, 12 lines 6-10. Examiner is interpreting a non-moveable tag located inside the housing of the cartridge as being permanent). Pauschinger nor Strand teaches a substrate fixed permanently to the exterior of the printer, Official Notice. supported by Kanaya, is taken that a substrate fixed permanently to the exterior of a print member is old and well known. It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the systems of Pauschinger et; Pauschinger, Strand and Hetzer to include the teachings of Official Notice to allow external access to a substrate. Pauschinger does not explicitly teach an identification tag with communication means on the substrate Chung teaches an identification tag with communication means on the substrate (see para. 96). It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the systems of systems of Pauschinger et; Pauschinger, Strand, Hetzer and Official Notice to include the teachings of Chung to tag and electronically identify objects as taught in Chung para, 96 lines 1-4.
- Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over
 Pauschinger et al. U.S. Patent No. 6.978,255 B1 in view of Pauschinger U.S. Patent No.

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6,041,704 in further view of Strand U.S. Pre-Grant Publication No. 2002/0199094 A1; Hetzer at al. U.S. Pre-Grant Publication No. 2002/0140755 and Official Notice, as supported by admitted prior art.

- 16. As per Claim 25, Pauschinger et al; Pauschinger and Strand teach the system of claim 22 as described above. Pauschinger does not explicitly teach wherein the data-generating unit includes an RF transceiver. Official Notice is taken that a data-generating unit includes an RF transceiver is old and well known. It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the systems of Pauschinger et; Pauschinger, Strand and Hetzer to include the teachings of Official Notice to facilitate communications with varied devices.
- 17. Claims 32-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pauschinger et al. U.S. Patent No. 6,978,255 B1 in view of Pauschinger U.S. Patent No. 6,041,704 in further view of Strand U.S. Pre-Grant Publication No. 2002/0199094 A1; Hetzer at al. U.S. Pre-Grant Publication No 2002/0140755 and Beerling et al. U.S. Patent No. 6,325,488 B1.
- 18. As per Claims 32-33, Pauschinger et al. does not explicitly teach the limitation taught by Beerling, a printed circuit comprising PTF polymer (see Col. 1 lines 53-65 and Col. 2 lines 1-9). Pauschinger teaches a decrypting means. Strand teaches a substrate fixed to a print member. It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the systems of Pauschinger et; Pauschinger, Strand and Hetzer to include the teachings of Beerling to ensure strength and thickness, as taught in Beerling. Col. 9.

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19. As per Claims 34-41, Pauschinger et al. does not explicitly teach the limitation taught by Beerling, a printed circuit comprising PTF polymer that is approximately 0.125 mm thick; comprising a substrate and at least one circuit having a total thickness of less than 1.5 mm; from 1.5 mm through 2 mm (see Col. 9 lines 43-67). Pauschinger teaches a decrypting means. Strand teaches a substrate fixed to a print member. It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the systems of Pauschinger et; Pauschinger, Strand and Hetzer to include the teachings of Beerling to ensure strength and thickness, as taught in Beerling, Col. 9.

- 20. Claims 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pauschinger et al. U.S. Patent No. 6,978,255 B1 in view of Pauschinger U.S. Patent No. 6,041,704 in further view of Strand U.S. Pre-Grant Publication No. 2002/0199094 A1 and Beerling et al. U.S. Patent No. 6,325,488 B1 and Official Notice, as supported by Francisco.
- 21. As per Claims 42, Pauschinger et al. in view of Pauschinger and Strand teaches the system of claim 19 as described above. Pauschinger et al does not explicitly teach wherein the first communications mode utilizes a first communications channel; and the second communications mode uses a second communications channel. Official Notice, supported by Francisco, is taken that the first communications mode utilizes a first communications channel; and the second communications mode uses a second communications channel is old and well known. It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the systems of

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Pauschinger et; Pauschinger, Strand and Hetzer to include the teachings of Official Notice to facilitate communications with varied devices.

- 22. Claims 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pauschinger et al. U.S. Patent No. 6,978,255 B1 in view of Pauschinger U.S. Patent No. 6,041,704 in further view of Strand U.S. Pre-Grant Publication No. 2002/0199094 A1 and Beerling et al. U.S. Patent No. 6,325,488 B1 and Official Notice, as supported by admitted prior art.
- 23. As per Claim 43, Pauschinger et al does not explicitly teach wherein the first communications channel is a wireless communications channel; and the second communications channel is a wireless communications channel. Official Notice is taken that the first communications channel is a wireless communications channel; and the second communications channel is a wired communications channel is old and well known. It would have been prima facie obvious to one of ordinary skill in the art at the time of invention to modify the systems of Pauschinger et; Pauschinger, Strand and Hetzer to include the teachings of Official Notice to facilitate communications with varied devices.

Conclusion

 THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TONYA JOSEPH whose telephone number is (571)270-1361. The examiner can normally be reached on Mon-Fri 7:30am-5:00pm First Fridays off

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Hayes can be reached on 571 272 0847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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Tonya Joseph Examiner Art Unit 3628

/John W Hayes/ Supervisory Patent Examiner, Art Unit 3628